

Appl. No.10/626,464
Office Action Mailed 06/29/2006
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AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1 (CURRENTLY AMENDED): A method for producing a ~~n-enhanced~~ fertilizer, comprising the step of mixing a granular fertilizer with a ferment comprising active bacteria in a fermentation medium to obtain an ~~an-enhanced~~ fertilizer, said ferment being used at a rate of at most 3 liters of ferment per ton of fertilizer, and wherein said ferment is obtained from a fermentation stopped before bacteria get into a dormant stage and have a lag time upon re-hydration.

Claim 2 (ORIGINAL): The method of claim 1, wherein the ferment is used at a rate of 0.5 to 2.0 liter of ferment per ton of granular fertilizer.

Claim 3 (ORIGINAL): The method of claim 1, wherein the ferment is cooled down prior to being mixed with the granular fertilizer.

Claim 4 (ORIGINAL): The method of claim 3, wherein the ferment is cooled down to about 0°C to 12°C.

Claim 5 (ORIGINAL): The method of claim 4, wherein the ferment is cooled down to about 0°C to 5°C.

Claim 6 (ORIGINAL): The method of claim 1, wherein the ferment of active bacteria is obtained by fermentation of said bacteria until the end of the exponential growth phase.

Claim 7 (ORIGINAL): The method of claim 6, wherein fermentation is allowed to proceed until a concentration of bacteria of at least 10^8 cells/ml is obtained.

Claim 8 (ORIGINAL): The method of claim 6, wherein the fermentation medium at the end of the exponential growth phase still contains nutrients for said bacteria.

Claim 9 (ORIGINAL): The method of claim 1, wherein additional fermentation medium is sprayed on the granular fertilizer.

Claim 10 (ORIGINAL): The method of claim 1, wherein the ferment is sprayed onto the granular fertilizer.

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Claim 11 (ORIGINAL): The method of claim 1, wherein the bacteria adheres to the granular fertilizer.

Claim 12 (ORIGINAL): The method of claim 1, wherein the ferment is sprayed onto a binding agent, said binding agent being thereafter mixed with the granular fertilizer.

Claim 13 (ORIGINAL): The method of claim 12, wherein the binding agent is selected from the group consisting of talc, flour, starch, sugar, and powdered milk.

Claim 14 (ORIGINAL): The method of claim 1, wherein the ferment is subjected to a step of concentration prior to being mixed with the granular fertilizer.

Claim 15 (ORIGINAL): The method of claim 14, wherein the step of concentration comprises at least one of centrifugation, dia-centrifugation, filtration and dia-filtration.

Claim 16 (CURRENTLY AMENDED): ~~An enhanced-fertilizer~~ produced by the method of claim 1, said fertilizer comprising:

- a) an agglomerate chemical substance containing at least one source of at least one of nitrogen, phosphate and potassium for use as granular fertilizer on crops or soils; and
- b) ~~bacteria, said bacteria being active upon re-hydration;~~

wherein said bacteria are being active upon re-hydration without lag time.

Claim 17 (CURRENTLY AMENDED): The ~~enhanced-fertilizer~~ of claim 16, wherein the bacteria are sprayed onto the agglomerate chemical substance.

Claim 18 (CURRENTLY AMENDED): The ~~enhanced-fertilizer~~ of claim 16, wherein the bacteria have been dehydrated prior to getting into a latent stage or prior to sporulation.

Claim 19 (CURRENTLY AMENDED): The ~~enhanced-fertilizer~~ of claim 16, wherein the bacteria are coated onto a binding agent.

Claim 20 (CURRENTLY AMENDED): The ~~enhanced-fertilizer~~ of claim 19, wherein the binding agent is selected from the group consisting of talc, flour, starch, sugar, and powdered milk.

Claim 21 (CURRENTLY AMENDED): The enhanced fertilizer of claim 16 further comprising nutrients for the bacteria.